

Floodplain Development Permit Application
City of Oxbow, NFIP Community No. 380681

PERMIT# _____

Please complete all items on this page

Applicant City of Oxbow Date: 5/12/2014
Address 708 Riverbend Road, Oxbow, ND 58047 Telephone (701) 238-2123
Location of proposed project: Section 24, Pleasant Twp, Cass County, ND
Name of Project: Water, Sewer, Streets, Drainage, Grading, and Miscellaneous Improvement District No. 2014-1
Contractor: TBD Telephone N/A
Project Contact Person: Andrew Aakre, PE Telephone (701) 282-4692

SECTION 1: DEVELOPMENT ACTIVITY

Check all that apply:

- Fill Mining Drilling Grading
- Excavation (except for structural development)
- Watercourse Alterations (including channel modifications)
- Drainage Improvements (including culvert work)
- Road, Street or Bridge Construction
- Subdivision (new or expansion)
- Other (specify on space below)

Comments or further explanation of work:

- Project includes construction of a subdivision including sanitary and storm sewer, water main, paving, grading, and miscellaneous improvement items.
- Project is designed and administered by Moore Engineering, Inc. as Project # 17524.
- No building construction will take place in the effective floodplain. Any residential lots in the preliminary FEMA 1% Annual Chance Floodplain will be elevated with compacted fill to an elevation at or above 915.9 (NAVD 1988).
- An exhibit showing the project features with the existing and preliminary FEMA 1% Annual Chance Flood boundaries is attached. Stamped plans and specifications are on file with the City.

Attach/submit plans, description, blueprints, etc., as available to this application.

SECTION 2: FLOODPLAIN DETERMINATION

- Floodplain (Flood Fringe)
- Floodway
- Project is not located in a Special Flood Hazard Area

Effective FIRM Panel & Date 3802630025A, 2/3/1982 FIRM Zone A14

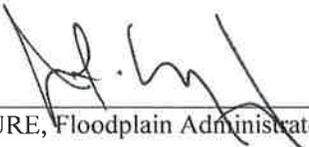
BFE at Project Site 912.9 (NGVD 29)

Preliminary FIS Information
38017C0990G & 38017C0995G, Zone AE
Revised Preliminary Map July 31, 2012
BFE 915.9 (NAVD 1988)

SECTION 3: ACTION / APPROVAL / DENIAL

Permit is Approved **Conditions:** _____

Permit is Denied **Comments:** _____



SIGNATURE, Floodplain Administrator

DATE 5/12/14



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWNSHIP OF
PLEASANT,
NORTH DAKOTA
CASS COUNTY

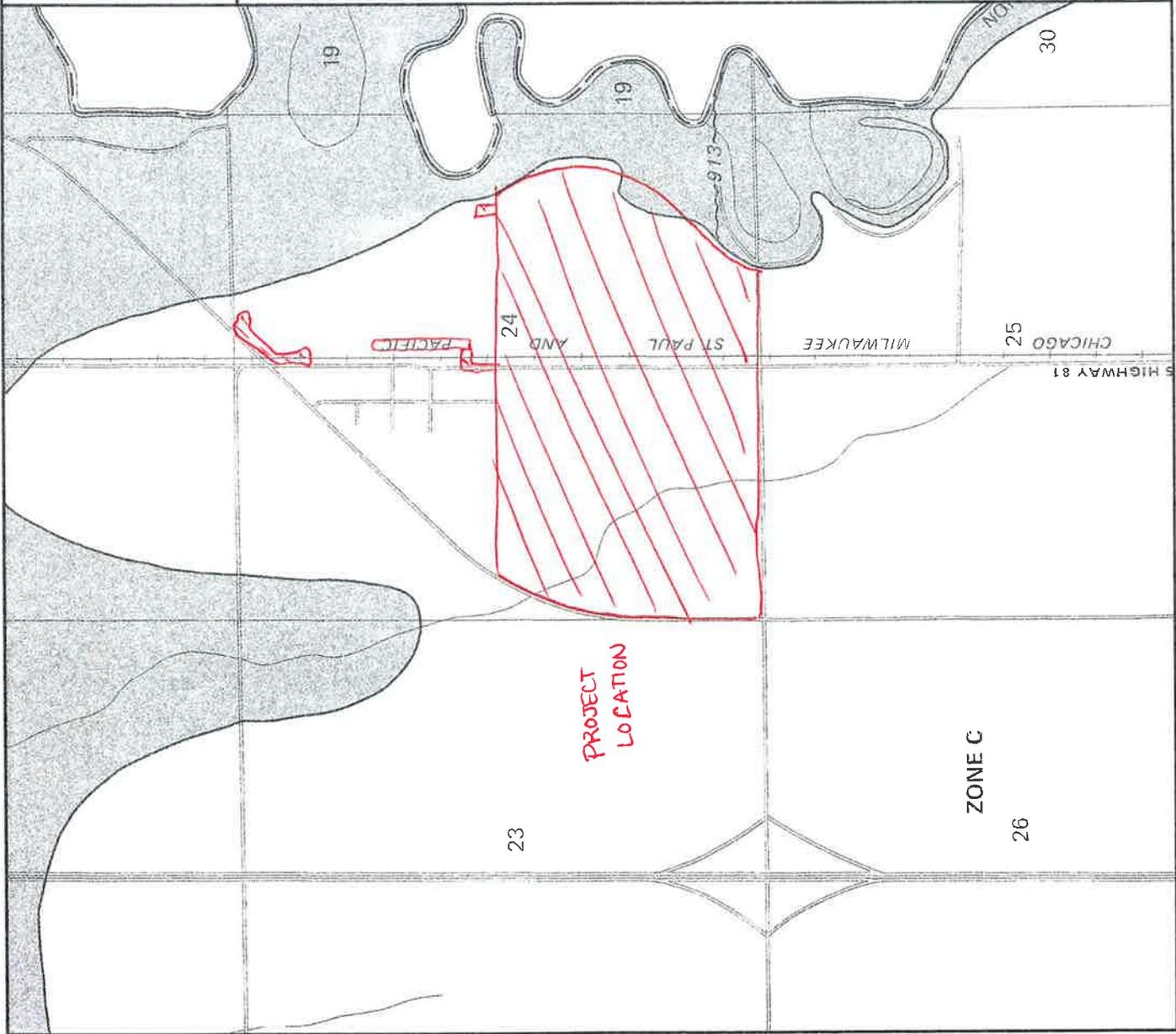
ONLY PANEL PRINTED

COMMUNITY-PANEL NUMBER
380263 0025 A

EFFECTIVE DATE:
FEBRUARY 3, 1982



federal emergency management agency



This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or Floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0 North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The projection used in the preparation of this map was Universal Transverse Mercator (UTM) zone 14. The horizontal datum was NAD83. GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov/> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA NIMS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, MD 20910-3282

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (201) 713-3242, or visit its website at <http://www.ngs.noaa.gov/>

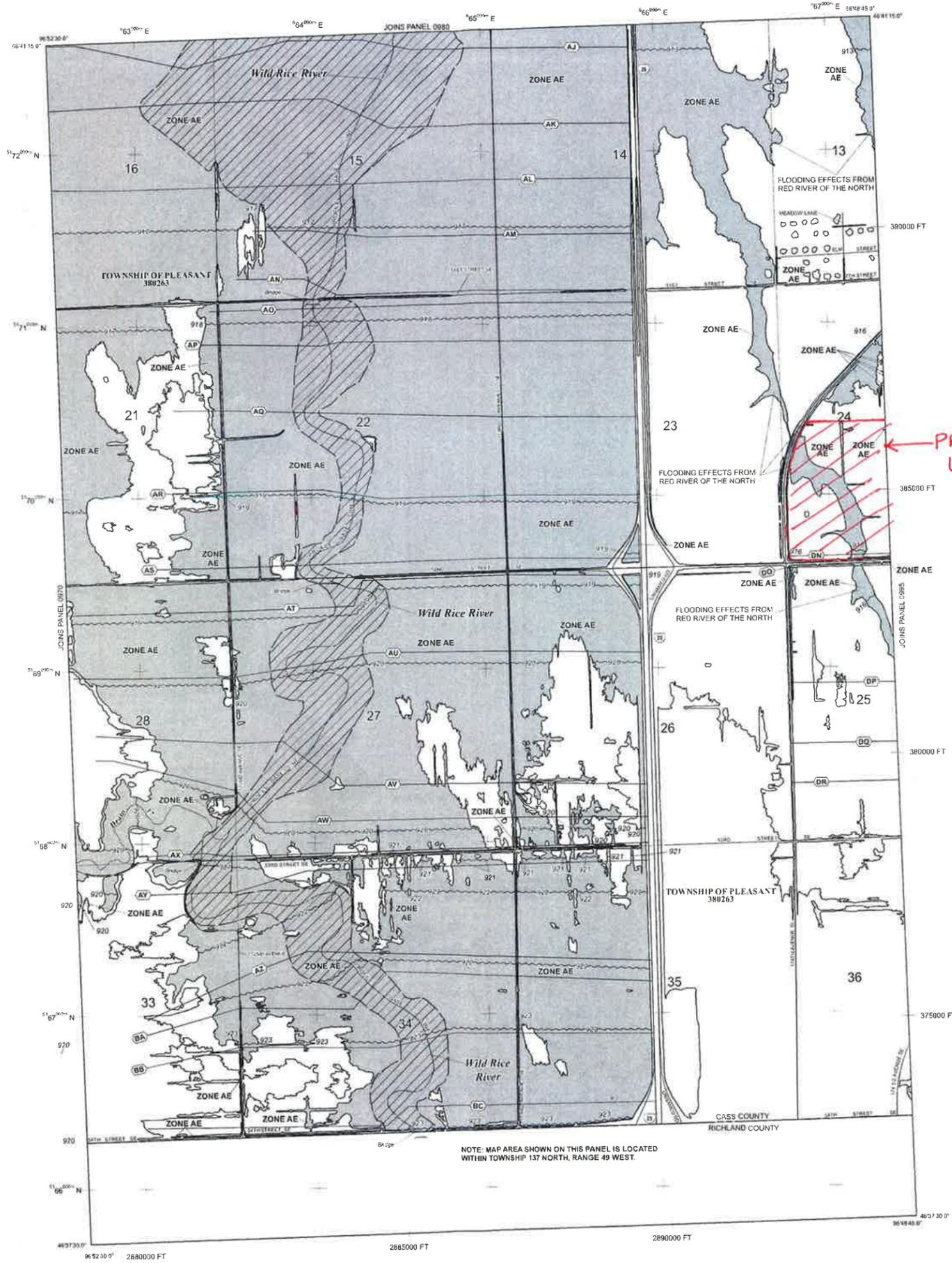
Base map information shown on this FIRM was provided by the Cass County GIS Department. Transportation data is current as of 2009. Political boundaries are current as of 2012.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodways and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or disannexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information and questions about this map, available products associated with this FIRM, including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2927) or visit the FEMA Map Service Center website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.



NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 137 NORTH, RANGE 49 WEST.

LEGEND

- SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
- The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. The base flood elevation is the water surface elevation of the 1% annual chance flood.
- ZONE A**
No Base Flood Elevations determined
- ZONE AE**
Base Flood Elevations determined
- ZONE AH**
Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined
- ZONE AO**
Flood depths of 1 to 3 feet (usually shear flow on sloping terrain); average depths determined. For areas of shallow run flooding, velocities also determined
- ZONE AR**
Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently described. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE ARB**
Area to be protected from 1% annual chance flood by a Federal flood protection system under construction, no Base Flood Elevations determined
- ZONE V**
Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined
- ZONE VE**
Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined
- FLOODWAY AREAS IN ZONE AE
- The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- OTHER FLOOD AREAS**
- ZONE X**
Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood
- OTHER AREAS**
- ZONE X**
Areas determined to be outside the 0.2% annual chance floodplain
- ZONE D**
Areas in which flood heights are undetermined but possible
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS
- OTHERWISE PROTECTED AREAS (OPAs)
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Size Flood Elevations, Flood depths or Flood velocities
- Base Flood Elevation line and value, elevation in feet
- Base Flood Elevation value where uniform within zone; elevation in feet
- * Referenced to the North American Vertical Datum of 1988 (NAVD 88)
- Cross section line
- Transport line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 49°56'N
97°07'W 325237'
- 1000-meter Universal Transverse Mercator grid ticks, zone 14
- 5000-foot grid ticks North Dakota State Plane approximate system, south zone (NAD83/ZONE 1323), Lambert Conformal Conic
- DX5510
Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5
River Mile
- MAP REPOSITORIES
Refer to Map Repository List on Map Index
- EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
- EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6526.

MAP SCALE 1" = 1000'

NFIP PANEL 0990G

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP
CASS COUNTY,
NORTH DAKOTA
(ALL JURISDICTIONS)

PANEL 990 OF 995
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
PLEASANT TOWNSHIP OF 380263 0990 G

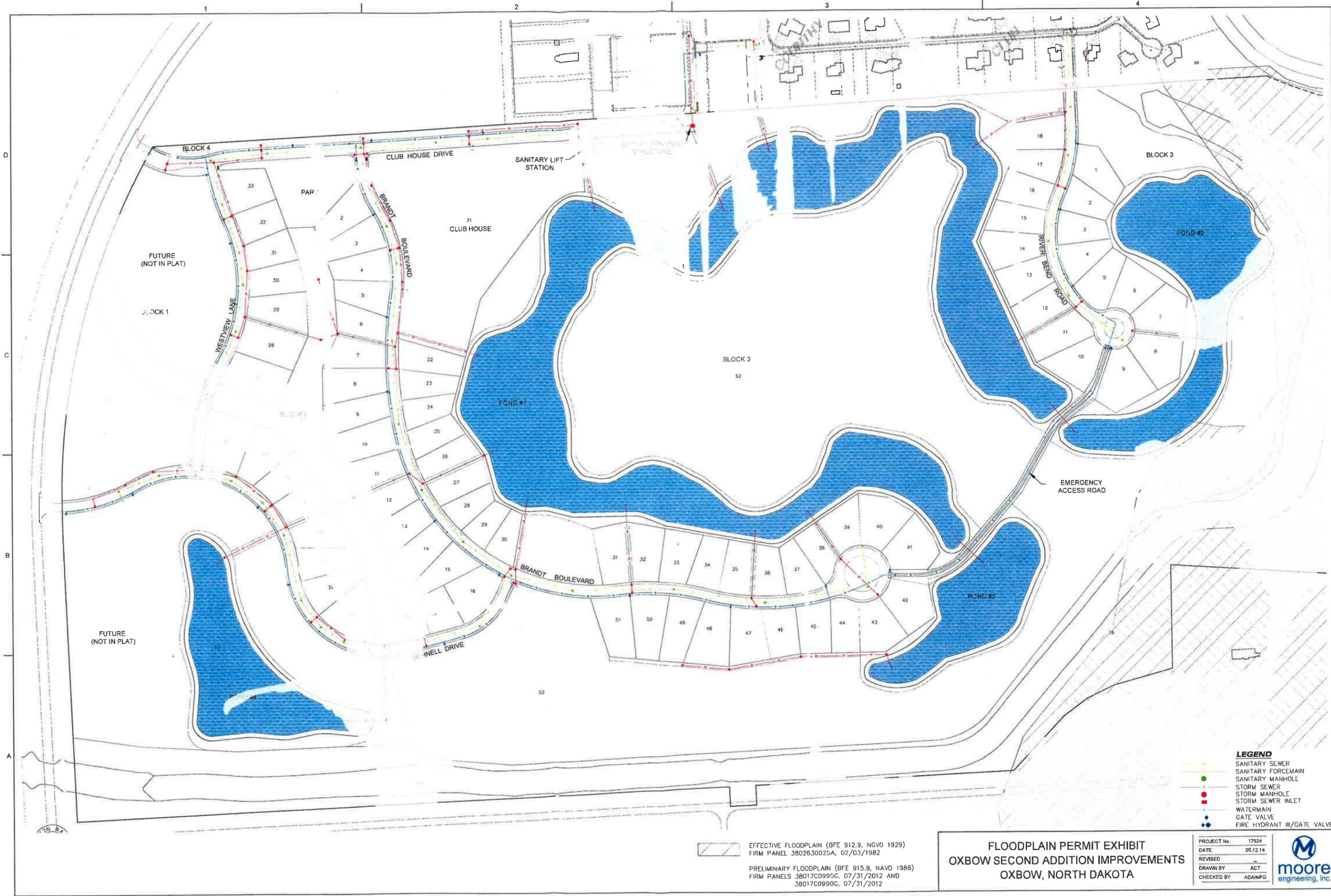
REVISED PRELIMINARY
JULY 31, 2012

Map Users: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
38017C0990G
EFFECTIVE DATE

Federal Emergency Management Agency

FILE LOCATION: R:\COW 3D Physical\17524\17524-Floodplain Permit Exhibit.dwg



 EFFECTIVE FLOODPLAIN (BFE 912.9, NGVD 1929)
 FIRM PANEL 38026.30025A, 02/03/1982
 PRELIMINARY FLOODPLAIN (BFE 915.9, NAVD 1988)
 FIRM PANELS 38017C0995G, 07/31/2012 AND
 38017C0990C, 07/31/2012

FLOODPLAIN PERMIT EXHIBIT
OXBOW SECOND ADDITION IMPROVEMENTS
OXBOW, NORTH DAKOTA

LEGEND

-  SANITARY SEWER
-  SANITARY FORCEMAIN
-  SANITARY MANHOLE
-  STORM SEWER
-  STORM SEWER INLET
-  WATERMAIN
-  GATE VALVE
-  FIRE HYDRANT W/GATE VALVE

PROJECT No.	17524
DATE	05.12.14
REVISED	
DRAWN BY	ACT
CHECKED BY	ADANPG

